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08/927,382	09/12/1997	MICHAEL JOHN COSS	1-1-1	8320

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JOSEPH B RYAN  
RYAN AND MASON, L.L.P.  
90 FOREST AVENUE  
LOCUST VALLEY, NY 11560

EXAMINER

REVAK, CHRISTOPHER A

ART UNIT PAPER NUMBER

2131

DATE MAILED: 10/06/2005

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 08/927,382  
Filing Date: September 12, 1997  
Appellant(s): COSS ET AL.

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William E. Lewis  
Reg. No. 39,274  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed July 14, 2005 appealing from the Final Office action mailed December 21, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

An appeal decision was rendered on January 14, 2004 sustaining the prior art rejections.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

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5,835,726	SHWED et al	11-1998
5,606,668	SHWED	02-1997

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-26 are rejected under 35 USC 102(e) as being anticipated by Shwed et al, U.S. Patent 5,835,726.

Claims 1-26 are rejected under 35 USC 103(a) as being unpatentable over Shwed, U.S. Patent 5,606,668.

**(10) Response to Argument**

A. The Appellant argues that claims 1,8,12,17, and 22 were amended to recite "a security policy comprises multiple rules" and Independent claim 16 was amended to recite "a domain comprises at least one security policy and a security policy comprises multiple rules, and that a plurality of administrators are associated with the plurality of domains".

I. It is argued by the Appellant that the limitations "a security policy comprises multiple rules" and that the "invention effectively provides a hierarchical rule selection procedure. That is, before a rule is applied to a particular packet, the appropriate security policy is first selected and then, a rule from the selected security policy is applied to the packet". It is asserted by the Appellant that Shwed '726 does not teach selecting a security policy having multiple rules among the selected security policy applied to the packet.

The Examiner respectfully disagrees with this assertion. The teachings of Shwed '726 disclose of receiving a packet where control passes to block 410 in which code is generated to match the rule services that were chosen, or selected, and the rule services have been previously defined and a decision is then made as to whether to accept or reject the packet based on the security rule, see column 8, lines 19-33. The citation of Shwed recites that the given policy is pre-selected and that the rule services are based on filter scripts that contain the rules used by the packet filter, see column 8, lines 10-14.

II. The Appellant states that "Shwed '726 does not teach or suggest selecting a security policy having multiple rules from among a plurality of security policies, each having multiple rules" and that "Shwed merely applies a rule from a single rule set associated with the packet filter residing on that computer".

The Examiner disagrees with the Appellant's assertion. Firstly, the Examiner notes that the claim requirement only requires **selection of a, or one, security policy** to meet the claim requirement. Secondly, Shwed '726 recites that *rule services are chosen, or selected*, and when applied to the packet, it determines if the packet is to be accepted or rejected, see column 8, lines 19-33. Shwed '726 also recites "implementing a given security policy at a node, see column 2, lines 45-50, which implies selection of a security policy. Thirdly, the Examiner directs the Appellant to the appeal decision rendered on January 14, 2004 wherein the Appeal Board Judges indicated on page 5 of the decision that "the claimed invention is directed towards rule set selection, not just an individual rule selection" and "Shwed only refers to '*multiple security rules*', not '*multiple*

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**sets of rules**". This is a key distinction because the Appellant has not claimed "multiple **sets of rules**", but rather multiple *security rules* that which is equivalent to *security policies* as indicated in the aforementioned Board decision.

III. The Appellant presents arguments that Shwed does not teach "among a plurality of administrators associated with a plurality of domains, only an administrator for a given domain is permitted to modify rules of a security policy for that domain as in claim 16."

The Examiner respectfully disagrees. Shwed '726 recites that there exists multiple administrators for a plurality of domains by disclosing that there can exist a number of network configurations that can be virtually endless, and configuring a plurality of domains with a plurality of administrators, see column 5, lines 39-54. Shwed '726 further teaches controlling data flow to groups of computers on the network and allowing system operators, or administrators, to provide internal and external security by allowing them to have flexibility in managing the communications, see column 6, line 65 through column 7, line 16. In this cited passage, the system administrator determines both internal and external network security settings for each department, or domain, wherein each has an established security policy. It is further taught by Shwed '726 that the system administrator enters the security rules and can make changes to the security rules so that the security of the network is maintained, see column 6, lines 39-54.

B. The Appellant lists the Examiner's statement that "a security policy is a collection of rules that dictate how the security policy is to be enforced".

I. Appellant comments "that there is no ability disclosed in the Shwed system to have a packet filter receive a packet, then select a security policy from among a plurality of security policies, and then apply the rule set associated with the selected policy." Shwed '726 merely applies "a given security policy to a packet and does not select a security policy from among a plurality of security policies". The Appellant further argues that there is "no policy selection followed by rule selection in a packet filter of Shwed".

The Examiner respectfully disagrees. Firstly, the Examiner notes that the claim requirement only requires **selection of a, or one, security policy** to meet the claim requirement. Secondly, Shwed '726 recites that *rule services are chosen, or selected*, and when applied to the packet, and determines if the packet is to be accepted or rejected, see column 8, lines 19-33. Shwed '726 also recites of "implementing a given security policy at a node, see column 2, lines 45-50, that which implies selection of a security policy. Thirdly, the Examiner directs the Appellant to the appeal decision was rendered on January 14, 2004 wherein the Appeal Board Judges indicated on page 5 of the decision that "the claimed invention is directed towards rule set selection, not just individual rule selection" and "Shwed only refers to '*multiple security rules*', not '*multiple sets of rules*'. This is a key distinction because the Appellant has not claimed "multiple **sets** of rules", but rather multiple *security rules* that which is equivalent to *security policies* as indicated in the decision on page 7 of the decision rendered on January 14, 2004.

II. The Appellant has argued that Shwed can not disclose "selecting at least one of a plurality of security policies as a function of a session key, wherein a security policy

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comprises multiple rules, and using the selected at least one security policies in validating the packet” as is recited in claims 1, 17, and 22, furthermore, nor can Shwed disclose “designating a plurality of independent security policies, wherein a security policy comprises multiple rules, determining which security policy is appropriate for the packet, and validating the packet using a portion of the multiple rules of the determined security policy as is recited in claims 8 and 12.

The Examiner respectfully disagrees. Firstly, the Examiner notes that the claim requirement only requires **selection of a, or one, security policy** to meet the claim requirement. Secondly, Shwed discloses of firewalls that contain rule bases for inbound and outbound communications whereby the communications are encrypted using a session key that is agreed on by both parties, see column 14, line 59 through column 15, line 11. The session keys must be exchanged prior to proceeding with encrypted communications between the two parties, see column 15, lines 33-43. Thirdly, Shwed ‘726 recites that *rule services are chosen, or selected*, then applied to the packet to determine if the packet is to be accepted or rejected, see column 8, lines 19-33. Shwed ‘726 also recites of “implementing a given security policy at a node, see column 2, lines 45-50, that which implies selection of a security policy. Fourthly, the Examiner directs the Appellant to the appeal decision was rendered on January 14, 2004 wherein the Appeal Board Judges indicated on page 5 of the decision that “the claimed invention is directed towards rule set selection, not just individual rule selection” and “Shwed only refers to ‘*multiple security rules*’, not ‘*multiple sets of rules*’”. This is a key distinction because the Appellant has not claimed “multiple **sets** of rules”, but rather multiple



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*security rules* that which is equivalent to *security policies* as indicated in the decision on page 7 of the decision rendered on January 14, 2004. Lastly, Shwed '726 recites that the selected security rule is used to validate the packet, see column 8, lines 19-31.

III. The Appellant states that Shwed does not disclose "administering the multiple rules such that only an administrator for a given domain is permitted to modify rules of a security policy for that domain".

The Examiner respectfully disagrees. Shwed '726 recites that there exists multiple administrators for a plurality of domains by disclosing that there can exist a number of network configurations that can be virtually endless, and configuring a plurality of domains with a plurality of administrators, see column 5, lines 39-54. Shwed '726 further teaches controlling data flow to groups of computers on the network and allowing system operators, or administrators, to provide internal and external security by allowing them to have flexibility in managing, or through making modifications, the communications, see column 6, line 65 through column 7, line 16. In this cited passage, the system administrator determines both internal and external network security settings for each department, or domain, wherein each has an established security policy. It is further taught by Shwed '726 that the system administrator enters the security rules and can make changes to the security rules so that the security of the network is maintained that does not affect communications, see column 6, lines 39-54.

IV. The Appellant states that Shwed '668 suffers from the same deficiencies as Shwed '726. Appellant comments "that there is no ability disclosed in the Shwed system to have a packet filter receive a packet, then select a security policy from among

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a plurality of security policies, and then apply the rule set associated with the selected policy.” Shwed '668 merely applies “a given security policy to a packet and does not select a security policy from among a plurality of security policies”. The Appellant further argues that there is “no policy selection followed by rule selection in a packet filter of Shwed”.

The Examiner respectfully disagrees. Firstly, the Examiner notes that the claim requirement only requires **selection of a, or one, security policy** to meet the claim requirement. Secondly, Shwed '668 recites that *rule services are chosen, or selected*, and when applied to the packet, and determines if the packet is to be accepted or rejected, see column 6, lines 12-25. Shwed '668 also recites of “implementing a given security policy at a node, see column 2, lines 1-4, that which implies selection of a security policy. Thirdly, the Examiner directs the Appellant to the appeal decision was rendered on January 14, 2004 wherein the Appeal Board Judges indicated on page 5 of the decision that “the claimed invention is directed towards rule set selection, not just individual rule selection” and “Shwed only refers to ‘*multiple security rules*’, not ‘*multiple sets of rules*’”. This is a key distinction because the Appellant has not claimed “multiple **sets** of rules”, but rather multiple *security rules* that which is equivalent to *security policies* as indicated in the decision on page 7 of the decision rendered on January 14, 2004

V. The Appellant presents arguments that Shwed does not teach “among a plurality of administrators associated with a plurality of domains, only an administrator

for a given domain is permitted to modify rules of a security policy for that domain as in claim 16.”

The Examiner respectfully disagrees. Shwed '668 recites that there exists multiple administrators for a plurality of domains by disclosing that there can exist a number of network configurations that can be virtually endless, and configuring a plurality of domains with a plurality of administrators, see column 3, lines 27-43. Shwed '668 further teaches controlling data flow to groups of computers on the network and allowing system operators, or administrators, to provide internal and external security by allowing them to have flexibility in managing, or through making modifications, the communications, see column 4, line 53 through column 5, line 5. In this cited passage, the system administrator determines both internal and external network security settings for each department, or domain, wherein each has an established security policy. It is further taught by Shwed '726 that the system administrator enters the security rules and can make changes to the security rules so that the security of the network is maintained that does not affect communications, see column 4, lines 27-42.

VI. The Appellant states the Examiner indicated “processing the extracted data packet in the Shwed invention.....would be recognized by one of ordinary skill in the art....as an obvious equivalent to deriving a session key for an incoming packet, because a session key indicates which security rules to use for the particular packet”. The Appellant then contends that the Examiner has failed to identify an objective evidence of record which would support modification of Shwed '668 to obtain this feature and statements are just “subjective belief and unknown authority”.

The Examiner indicates that the Appellant has not addressed this statement in previous responses challenging the examiner for evidence, so it is rendered moot since this was not seasonably challenged upon the first submission of the statement by the Examiner in the first non-final office action mailed on August 18, 1999. Lastly, the claims were viewed as a whole by the Appeal Board Judges whereby a decision was rendered on January 14, 2004 that included this statement by the Examiner. On page 5 of the decision mailed January 14, 2004, "it has been determined that Appellant's arguments in the Brief do not dispute the assertion of a session key as being equivalent to the extraction of packet data to determine the applicability of a security rule in Shwed". A Board of Patent Appeals and Interferences decision in an application has res judicata effect and is the "law of the case" and is thus controlling in that application and any subsequent, related application. Therefore, a submission containing arguments without either an amendment of the rejected claims or the submission of a showing of facts will not be effective to remove such rejection. See MPEP § 706.03(w) and 1214.01. The arguments of the session key are substantially similar to the issues already decided by the Board of Patent Appeals and the Appellant's arguments are moot.

In summary of Shwed '668, the Examiner directs the Appellant to the appeal decision rendered on January 14, 2004. The rejection of claims 1-26 has been previously upheld as decided by the Appeal Board Judges in that it clearly teaches each and every element of the Appellant's claim language, the matter of issues now

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reside in the fact of whether or not Shwed '726 and Shwed '668 disclose a "security policy comprises multiple rules" and "a domain comprises at least one security policy and a security policy comprises multiple rules, and that a plurality of administrators are associated with the plurality of domains" in which the Examiner contends that both Shwed '726 and Shwed '668 discloses.

**(11) Related Proceeding(s) Appendix**

Copies of the court or Board decision identified in the Related Appeals and Interferences section of this examiner's answer are provided accompanying this Examiner's Answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
Christopher Revak

Primary Examiner

AU 2131

Conferees:  
  
Matthew Smithers

Primary Examiner

AU 2137

  
Ayaz Sheikh

Supervisory Primary Examiner

AU 2131

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte MICHAEL JOHN COSS, DAVID L. MAJETTE, and  
RONALD L. SHARP

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Appeal No. 2002-0299  
Application No. 08/927,382

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ON BRIEF

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Before KRASS, JERRY SMITH, and RUGGIERO, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-26, which are all of the claims pending in the present application.

The disclosed invention relates to a system and method for implementing a computer network firewall by applying a security policy represented by a set of access rules for a given communication packet.

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Claim 1 is illustrative of the invention and reads as follows:

1. A method for validating a packet in a computer network, comprising the steps of:

deriving a session key for said packet;

selecting at least one of a plurality of security policies as a function of the session key; and

using the selected at least one of the security policies in validating said packet.

The Examiner relies on the following prior art:

Shwed

5,606, 668

Feb. 25, 1997

Claims 1-26, all of the appealed claims, stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Shwed.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs,<sup>1</sup> the final Office action, and Answer for the respective details.

#### OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support

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<sup>1</sup>The Appeal Brief was filed July 17, 2000 (Paper No. 13). In response to the Examiner's Answer dated September 26, 2000 (Paper No. 14), a Reply Brief was filed November 30, 2000, (Paper No. 15), which was acknowledged and entered by the Examiner as indicated in the communication dated December 15, 2000 (Paper No. 16).

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of the rejection, and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-26. Accordingly, we affirm.

Appellants nominally indicate (Brief, page 3) that the claims on appeal stand or fall together as two separate groups. For the first group including claims 1-15 and 17-26, we will select claim 1 as the representative claim and claims 2-15 and 17-26 will stand or fall with claim 1. Claim 16, grouped and argued separately by Appellants, will be considered independently. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Only those arguments actually made



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by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered (see 37 CFR § 1.192(a)).

As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an Examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1051-52, 189 USPQ 143, 147 (CCPA 1976).

With respect to representative claim 1, Appellants' arguments in response to the obviousness rejection assert that the Examiner has failed to establish a prima facie case of obviousness since all of the claimed limitations are not taught or suggested by the applied prior art references. In particular, Appellants contend (Brief, page 5) that, in contrast to the language of claim 1 which requires the selection from a plurality

of security policies, Shwed merely selects from plural rules in a single rule set or security policy. Appellants amplify their arguments by asserting (Brief, page 6) that, unlike Shwed,

" . . . the claimed invention is directed toward rule set selection not just *individual rule* selection" and also that  
". . . Shwed only refers to 'multiple security rules' . . . not multiple sets of rules."<sup>2</sup>

After careful review of the Shwed reference in light of the arguments of record, however, we are in agreement with the Examiner's position as stated in the Answer. In our view, the Examiner's assertion (Answer, page 3) that the claimed "security policies" correspond to Shwed's security rules is a reasonable interpretation of the claim language when considered in light of Appellants' specification. We note that it is a basic tenet of patent law that claims are to be given their broadest reasonable interpretation consistent with the description in the specification.

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<sup>2</sup>In the obviousness rationale set forth by the Examiner (final Office action, page 3), it is asserted that the extraction of packet data to determine the applicability of a security rule in Shwed would be obviously recognized and appreciated by the skilled artisan as corresponding to the claimed "session key." Appellants' arguments in the Briefs do not dispute this assertion and we find no error in the Examiner's stated position.

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With the above discussion in mind, we have reviewed Appellants' specification for guidance as to the proper interpretation of the claim language and we find little enlightenment as to how to properly interpret the "security policies" language of representative claim 1. Appellants' argument (Reply Brief, page 2) in support of their position as to the proper interpretation of the language of claim 1 refers to the portions of their specification at page 5, lines 1 and 2 and lines 23 and 24. We do not find this persuasive. The excerpt at page 5, lines 1 and 2 merely states that a single firewall can support multiple users where each user might have a separate security policy.

Similarly, in our view, the portion at page 5, lines 23 and 24 which states that "security policies can [our emphasis] be represented by sets of access rules," rather than supporting Appellants' asserted restrictive interpretation of "security policies," instead suggests a broader and more inclusive interpretation. Given the paucity of description in Appellants' specification as to the nature of a "security policy," we can only reach the conclusion that the "security policies" language of representative claim 1 simply does not require the interpretation asserted by Appellants in the Briefs. In our

opinion, we find no error in the Examiner's interpretation of the claimed "security policies" as corresponding to Shwed's security rules in which each rule can be considered a security policy, especially in view of the fact that there is no proscription against a rule set or security policy having only one rule in the set.

For the above reasons, since it is our opinion that the Examiner's prima facie case of obviousness has not been overcome by any convincing arguments from Appellants, the Examiner's 35 U.S.C. § 103(a) rejection of representative independent claim 1, as well as claims 2-15 and 17-26 which fall with claim 1, is sustained.<sup>3</sup>

We also sustain the Examiner's 35 U.S.C. § 103(a) rejection of independent claim 16, grouped and argued separately by Appellants. Although claim 16 is directed to the feature of permitting modification of domain access rules only by an administrator for a given domain, Appellants' arguments are an extension of those made previously with regard to claim 1. In

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<sup>3</sup>While Appellants have grouped (Brief, page 3) claims 1-15 and 17-26 as a single group which stand or fall together, the Brief at pages 8-10 briefly discusses the merits of all of the claims. The extent of these arguments, however, relies on Appellants' asserted interpretation of "plural security policies" as multiple sets of rules, an assertion which we have found to be unpersuasive as discussed supra.

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Appellants' view (Brief, pages 10 and 11; Reply Brief, page 7), since Shwed's system involves selective placement of packet filters where each filter has a single set of rules in contrast to Appellants' system which has separate rule sets (security policies) in a single firewall, Shwed has no disclosure of independent administration of respective security policies as claimed. Appellants go on to assert that Shwed's system suggests a single administrator for the entire single rule set rather than a separate administrator for each domain.


It is our view, however, that the requirements of appealed claim 16 do not distinguish over the system described by Shwed at least in the manner broadly claimed by Appellants. Even assuming, arguendo, that Appellants' suggestion that Shwed has a single administrator for all domains is correct, this single administrator would also be an administrator for a given domain as claimed.

In summary, we have sustained the Examiner's 35 U.S.C. § 103(a) rejection of all of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-26 is affirmed.

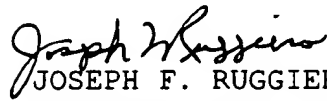
Appeal No. 2002-0299  
Application No. 08/927,382

No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136(a).

AFFIRMED

  
ERROL A. KRASS )  
Administrative Patent Judge )

  
JERRY SMITH )  
Administrative Patent Judge )

  
JOSEPH F. RUGGIERO )  
Administrative Patent Judge )

BOARD OF PATENT  
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JFR/hh

Appeal No. 2002-0299  
Application No. 08/927,382

JOSEPH B. RYAN  
RYAN AND MASON, L.L.P.  
90 FOREST AVE.  
LOCUST VALLEY, NY 11560